

ABSTRACT OF THE DISCLOSURE

A surface-emitting semiconductor laser element includes a lower AlGaAs multilayer reflection film, an active layer, a current-confinement layer of a selective-oxidation type or an ion-injection type, and an upper AlGaAs multilayer reflection film which are formed above a GaAs substrate in this order in parallel to a surface from which laser light is emitted. The active layer includes: a quantum well made of InGaAsP having a first forbidden band width; and sublayers arranged adjacent to the quantum well and made of InGaP or InGaAsP which has a second forbidden band width greater than the first forbidden band width. The lower and upper AlGaAs multilayer reflection films constitute an optical resonator. The surface-emitting semiconductor laser element further includes a pair of electrodes which inject current into the active layer.

BEST AVAILABLE COPY